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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-------------------------|---------------------|------------------|
| 09/997,532  | 11/29/2001  | SHAWN R. GETTEMY        | PALM-3698           | 5478             |
| WAGNER, MURABITO & HAO LLP Third Floor Two North Market Street San Jose, CA 95113 |             |                         | EXAMINER            |                  |
|   |             |                         | RAO, SHRINIVAS H    |                  |
|   |             |                         | ART UNIT            | PAPER NUMBER     |
|   |             |                         | 2814                |                  |
|   |             | DATE MAILED: 08/25/2004 |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  | 09/997,532  | GETTEMY, SHAWN R.  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | Steven H. Rao   | 2814   |  |  |  |  |
| The MAILING DATE of this communication appeared for Reply  |   | <u></u>  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tin<br>ly within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>e, cause the application to become ABANDONE           | nely filed  rs will be considered timely.  the mailing date of this communication.  D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 18 J  | <u>une 2004</u> .   |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This   | s action is non-final.  |  |  |  |  |  |
| •  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4) ☐ Claim(s) 1-32 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-32 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or  | wn from consideration.  |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | er.   |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority application from the International Bureat</li> <li>* See the attached detailed Office action for a list</li> </ul>  | ts have been received.<br>ts have been received in Applicati<br>rity documents have been receive<br>u (PCT Rule 17.2(a)).   | on No<br>ed in this National Stage   |  |  |  |  |
|  |   |  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date</li> </ol>  | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:  |  |  |  |  |  |

#### **DETAILED ACTION**

## **Priority**

The Application as currently filed does not claim priority from any previously filed Patent Application.

Therefore currently the earliest available filling date is the U.S. filling date namely November 29, 2001

## **Request for Continued Examination Application**

The request filed on 06/03/2004 for a Request for Continued Examination Application (RCE) under 37 CFR 1.114(d) based on parent Application No. 09/997532 is acceptable and a RCE has been established. An action on the RCE follows.

#### Information Disclosure Statement

No IDS has been filed to date in this Application.

## **Preliminary Amendment Status**

Acknowledgment is made of entry of preliminary amendment filed 06 /03 /2004 on June 18, 2004.

Therefore claims 1-2, 6,10-13,17,21-2327, and 32 as amended by the amendment and claims 3-5,7-9,14-16,18-20,24-27,29-31 as originally filed are currently pending in the Application.

Art Unit: 2814

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Claims 1-3,5-14 and 16-25 and 27-32 are rejected under 35 U.S.C. 103(a) as being obvious over Mamiya et al. (U.S. Patent No. 5,764,322, herein after Mamiya) in view of Kubo et al. (U.S. Patent No. 6,456,279 herein after Kubo).

With respect to claims 1 and 12 Mamiya describe, etc., col. 8 lines 20-25) a reflective display disposed above said backlight device; (Mamiya fig. 14 # 108).

Art Unit: 2814

Mamiya does not specifically describe an embedded light guide extending through said reflective display which conducts light from said backlight device to an area above said reflective display.

However Kubo in figure 4 and col. 8 lines 65 to col. 9 line 20 describes an embedded light guide extending through said reflective display which conducts light from said backlight device to an area above said reflective display so that an image of good visibility which has high luminance and is uniform over its entire reflective display area can be obtained even in an environment in which the external light is insufficient.

Therefore it would have been obvious to one of ordinary skil in the art at the time of the invention to include Kubo's embedded light guide extending through said reflective display which conducts light from said backlight device to an area above said reflective display in Mamiya's device so that an image of good visibility which has high luminance and is uniform over its entire reflective display area can be obtained even in an environment in which the external light is insufficient. (Kubo col. 6 lines 5-10). The remaining limitation of claim 1:

wherein the light is reflected on to said reflective display (Kubo figure 4).

With respect to claims 2 and 13 describe the display assembly of Claim 1, further comprising a front light reflecting film disposed above a top surface of said reflective display and operable to reflect light onto said top surface and being sufficiently transparent to allow viewing of said reflective display. (figure 14, 116).

With respect to claims 3 and 14 describe the display assembly of Claim 1, wherein said backlight device is an electro-luminescent (EL) light device. (col. 10 lines 45-46).

With respect to claims 5 and 14 describe the display assembly of Claim 1, wherein said backlight device is a cold cathode fluorescent tube (CCFT) light device. (col. 10 lines 45-46).

Wit h respect to claims 6 and 17 describe the display assembly of Claim 1, further comprising a brightness enhancing film (BEF) disposed between said backlight device and said bottom surface of said reflective display and for directing fight toward said light guide. (Col. 9 lines 10-39).

With respect to claims 7,8, 29; 18, 19, 30 and 31 describes the display assembly of Claim 1, wherein said reflective display is an electronic ink display and an electronic paper display.

The limitations the reflective display is used as a electronic ink display and electronic paper display, these limitations recite the manner in which the claimed apparatus is intended to be employed.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ 2d 1647 ( 1987)*.

Art Unit: 2814

With respect to claim 10 describes the display assembly of Claim 1, wherein said fight guide comprises a plurality of said light guides which enclose an area of said reflective display. (col. 7 lines 21-25).

With respect to claim 11 describes the display assembly of Claim 10, wherein said plurality of said light guides enclose a sub-pixel of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40, col. 10 line 35).

With respect to claim 21 describes the display assembly of Claim 1, wherein said light guide comprises a plurality of said light guides which enclose an area of said reflective display. (Mamiya col.1 lines 50-55)

With respect to claim 22 describes the display assembly Claim 12, wherein said plurality of said light guides enclose a sub-pixel of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40).

With respect to claim 23 Mamiya describes a display assembly for an electronic device comprising: a backlight device; a reflective display disposed above said backlight device; and a plurality of light guides embedded within said reflective display and enclosing a display area within said reflective display, wherein said light guides conduct light from said backlight device to an area above said reflective display. ( rejected for reasons stated under claims 1,11 etc.).

With respect to claim 24 Mamiya describes the display assembly of Claim 23, further comprising a front light reflecting film disposed above said reflective display and operable to reflect said light back onto said reflective display and being sufficiently

Art Unit: 2814

transparent to allow viewing of said reflective display. ( rejected for same reasons as those stated under claim 2 above).

With respect to claim 25 Mamiya describes the display assembly of Claim 23, wherein said backlight device is an electro-luminescent (EL) light device. (Hirakata col.3 lines 17-20, etc).

With respect to claim 27 Mamiya describes the display assembly of Claim 23, wherein said backlight device is a cold cathode fluorescent tube (CCFT) light device. (col. 10 lines 45-46).

With respect to claim 28 describes the display assembly of Claim 23, further comprising a brightness enhancing film (BEF) disposed above said backlight device and below said reflective display for directing fight toward said plurality of light guides. (Col. 9 lines 10-39).

With respect to claim 32 describes the display assembly of Claim 23, wherein said plurality of light guides enclose a sub-pixel area of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40).

**B.** Claims 4, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mamiya et al (U.S. Patent No. 5,764,322, herein after Mamiya) in view of Kubo (U.S. Patent No. 6,456,279, herein after Kubo) as applied to claims 1-3, etc. above and further in view of Hirakata et al. (U.S. Patent No. 6,191, 833 herein after Hirakata).

With respect to claim 4 Mamiya describes the display assembly of Claim 1.

Mamiya does not specifically describe the backlight device contains at least one light emitting diode (LED).

However, Hirakata in col. 3 lines 17 to 20 describes the back light can be a Led or fluorescent tube to save valuable real estate, provide a light source with longer life and also a device that does not generate as much heat thereby eliminating the need for heat removing devices like heat sink etc.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Hirakata's Led for Mamiya's fluorescent tube in Mamiya's device to save valuable real estate, provide a light source with longer life and also a device that does not generate as much heat thereby eliminating the need for heat removing devices like heat sink etc.

With respect to claim 15 describes the display assembly of Claim 12, wherein said backlight device contains at least one light emitting diode (LED). ( Hirakata col.3 lines 17-20, etc).

With respect to claim 26. The display assembly of Claim 23, wherein said backlight device contains at least one light emitting diode (LED).

## Response to Arguments

Applicant's arguments (that are repeated and also stated in the previous response) filed on June 03, 2004 have been fully considered but they are not persuasive for reasons set out previously and incorporated here by reference for the sake of brevity.

Applicants' new arguments are most in view of the newly appliedart and the rejection based thereon.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (703) 306-5945. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.

Steven H. Rao

**Patent Examiner** 

August 17, 2004.

LONG PHAM
PRIMARY EXAMINER